

83  
S14  
3715

3715

U. S. G. SURVEY,  
LIBRARY AND ARCHIVES  
MAR 3 - 1915  
Acc. No.

Diag. Cht. No. 8502-1 & 8700

Department of Commerce and Labor  
COAST AND GEODETIC SURVEY

*O. H. Gittman*  
Superintendent.

State: *Alaska*

DESCRIPTIVE REPORT.

Hydrographic Sheet No. 3715

LOCALITY:

*Shumagin Is.*

1914

CHIEF OF PARTY:

*J. B. Miller*

11-4645



DEPARTMENT OF COMMERCE

COAST & GEODETIC SURVEY

O.H. Tittmann, Supt.

-----

ALASKA

SHUMAGIN ISLANDS

-----

Original Hydrographic Sheet No. ~~36~~ 3715

HARBOR SURVEYS - SHUMAGIN ISLANDS & ALASKA PENINSULA

-----

Surveyed in Aug., Sept., and Oct., 1914.

by the party on the C. & G. S. S. PATTERSON

J.B. Miller, Assist., C. & G. Survey, Chief of Party

A.M. Sobieralski, Assist., " in chg. of sdg. boat

P. Herberger, Mate, " " " " "

-----

Scales: various

Soundings in fathoms at mean low low water

Tide gauge at Pirate Cove

-----

Area 2 sq. stat. miles (Kupreanof Harbor)

-----

Positions plotted by P.H.

Soundings " " J.S.

DEPARTMENT OF COMMERCE

Coast & Geodetic Survey,  
O.H.Tittmann, Supt.

ALASKA: SHUMAGIN ISLANDS AND ALASKA PENINSULA

A Descriptive Report on Hydrographic Sheet ~~99~~. 3715

Harbor Surveys: Kupreanof Harbor, 1: 10,000  
- Little Harbor, (Fox Hole), 1: 10,000  
- Pirate Cove\* 1: 2,500  
- Shoal Bay, Sanborn Harbor, 1: 5,000  
The Kitchen, Sanborn Harbor, 1: 1,000

1. REPORT: LIMITS.

I have the honor to report as follows on hydrographic sheet 99, Harbor Surveys, in the SHUMAGIN ISLANDS and ALASKA PENINSULA. KUPREANOF HARBOR is in lat.  $55^{\circ} 47'$ , long.  $159^{\circ} 21'$ ; and the soundings are recorded in Vol.1 sheet 99. LITTLE HARBOR is at the northeast point of POPOF ISLAND; and the soundings are recorded in Vols.2, 3, and 4 sheet 7. PIRATE COVE is at the northeast point of POPOF ISLAND, a little way northward of LITTLE HARBOR; and the soundings are recorded in Vol.1, sheet 7. SHOAL BAY is in SANBORN HARBOR, NAGAI ISLAND; and the soundings are recorded in Vols.2, 4, and 5, sheet 6. The KITCHEN is in CATON'S COVE, SANBORN HARBOR, NAGAI ISLAND; and the soundings are recorded in Vols.6, 8, and 9, sheet 6. The sounding party for KUPREANOF HARBOR was in charge of A.M.SOBIER-ALSKI, Assistant, C. & G. Survey; and for all the other harbors the sounding party was in charge of PAUL HERBERGER, Mate, C. & G. Survey. The soundings were all taken with the hand lead: lines were run at intervals of 1/8 mile, 1/16 mile, and closer in many instances.

2. KUPREANOF HARBOR.

KUPREANOF HARBOR lies between PAUL and JACOB ISLANDS, on the coast of the ALASKA PENINSULA. It is far the best and most accessible harbor in the vicinity. It is circular in outline, 1-1/10 miles across: the western entrance is 7/10 mile wide, and is safe: the eastern entrance is 4/10 mile wide, and has been used by vessels. Soundings in the western approach are shown on sheet 103. To enter KUPREANOF HARBOR, steer  $90^{\circ}$  (N70E mag.) in the middle of the western entrance, and when the north point of the entrance is a-beam, 3/10 mile distant, steer  $44^{\circ}$  (N24E mag.) with the peak of

PAUL ISLAND right ahead, and LEADER ISLAND right astern and closed on the south point of the entrance; when the eastern entrance is about to open, anchor in 10 fms. black sand bottom, with the points of the eastern entrance in range.

### 3. LITTLE HARBOR.

LITTLE HARBOR is called also FOX HOLE. It is a "hole-in-the-wall", 1 mile southward of HIGH ISLAND, at the northeast point of POPOF ISLAND. It is  $8/10$  mile long and  $3/10$  mile wide. The entrance is  $3/10$  mile wide, but one must keep in the northern half of it: there is a rock awash at half tide,  $1/10$  mile  $40^\circ$  (N21E mag.) from the southern inner point of the entrance. The northern point of the entrance is a sheer cliff, and may be passed close-to, avoiding however a narrow ledge of rocks at its base. The head of the bay is a sand flat with a few boulders on it, which bares for  $3/10$  mile from high water line. The anchorage is in 6 fms., in the middle of the bay. To enter LITTLE HARBOR, steer  $255^\circ$  (S56W mag.) for the northern part of the entrance, and when the southern inner point is abeam, and one is in the narrowest part of the entrance, round sharply to  $225^\circ$  (S26W mag.), keeping in the middle, and anchor abreast of a low point which will be seen on the southeast shore. The southeast and northwest shores are safe  $1/10$  mile off or less, but the head of the bay has the sand flat mentioned, and is deceptive at high water: one must depend on the lead in approaching it. Two small corrections to the shore-line as surveyed in 1913, were made by the hydrographic party in 1914: they are shown in ink on this sheet, and will be seen at the northern point of the entrance, and on the western side near the head of the bay.

### 4. PIRATE COVE.

PIRATE COVE is at the northeast point of POPOF ISLAND,  $1-4/10$  miles westward of HIGH ISLAND; it faces on KOROVIN STRAIT, and is difficult to distinguish from seaward: the low headland which encloses it hides the settlement and wharf. It is properly only a boat harbor, and has only 10 feet at low water: a vessel of this draft may be maneuvered in and out; but a vessel of greater draft must lie in the mud at low tide. Schooners of 250 tons load cargo here regularly. The UNION FISH COMPANY, which is a codfishing company of SAN FRANCISCO, has a large plant here; which is the main station for this region: boats from here fish in all the waters for a distance of  $4-1/2$  miles round about; and several other smaller stations on neighboring islands and on the mainland are operated. There is a wharf 100 feet long, with 5 to 10 feet at low water at the end of it. The entrance to the harbor is 50 yards wide, and has 10 feet at low water; the harbor is 50 yards wide, and has 2 fms. at low water. A vessel should heave to outside and send a small boat to reconnoiter, before attempting to enter. Temporary anchorage may be found along the shore of POPOF ISLAND anywhere westward of PIRATE COVE, but none can be found eastward. There is also temporary anchorage off the west end of KOROVIN ISLAND, on the opposite side of KOROVIN STRAIT. There are several topographic corrections shown in ink on the sheet, comprising buildings and wharf.



#### 5. SHOAL BAY.

SHOAL BAY is on the southwest side of SANBORN HARBOR, NAGAI ISLAND, 3-2/10 miles inside the entrance. It consists merely of a boat harbor, behind a gravel bar which dries in places at low water. The entrance is at the southeast side, past the end of the gravel bar, following the shore from the eastward. The entrance is 65 yards wide and has 2-3/4 fms. at low water; there is 5 fms. behind the bar, and a clear space 1/10 mile across.

#### 6. THE KITCHEN.

The KITCHEN was formerly called PORPOISE HARBOR, after a schooner of that name which wintered there many years ago. It should not be called by that name, because PORPOISE HARBOR is a much larger body of water in another locality, which is the inlet of NAGAI ISLAND next northeastward from SANBORN HARBOR. The KITCHEN is the inner part of CATON'S COVE, and lies behind a gravel spit which is 6 feet above high water. The entrance is 35 yards wide, passing southward of the spit: it has 10-1/2 feet at low water. The lagoon which forms the KITCHEN is 1/10 mile across, and has 4 fms. at low water. A vessel of moderate size could be maneuvered through the narrow channel, favoring the side next the gravel spit; and could be moored inside. The KITCHEN is enclosed by a semicircle of steep mountains on which there is snow during most of the summer.

#### 7. MAGNETIC VARIATION.

The magnetic variation at KUPREANOF HARBOR was 20° East in 1914. The variation at LITTLE HARBOR and PIRATE COVE was 19° 15' East, and at SHOAL BAY and the KITCHEN was 19° 25' East.

Respectfully submitted,

*James B. Miller*

Assistant, C. & G. Survey,

To the Superintendent,

Chief of Party.

Coast & Geodetic Survey,

Washington, D. C.

Seattle, February 15, 1915.

SHEET NO. 99

KUPREANOF HARBOR

S. W. ALASKA.

DATE	BOAT	LETTER	VOL.	HOURS	POSITIONS	SDGS.	MILES (stat)
Aug. 12	Launch No. 38	<i>b</i>	1	4.2	31	56	5.5
" 17	Cutter	<i>a</i>	1	3.5	81	271	6.8
July 10	Launch No. 38	<i>a</i>	1	1.2	11	8	<del>0</del>
				8.9	123	335	12.3

Sq. Statute Miles:



VEC  
Apr. 20, 1915  
L. P. S.

HYDROGRAPHIC SHEET 3715.

Shumagin Islands, Alaska, by Assistant  
J. B. Miller in 1914.

TIDES.

	Pirate Cove	Kupreanof Harbor
	ft.	ft.
Mean lower low water, or plane of reference on staff	2.8	3.4
Lowest tide observed " "	1.6	2.9
Highest " " " "	11.7	10.5
Mean range of tide	5.4	5.6

Hyd. Sheet 3715

This sheet was projected, protracted and soundings plotted in pencil by field party. In the field work of this sheet no times were recorded for soundings except at positions. In a great many cases quite a distance was run between positions and a large number of soundings taken between positions which left the exact positions of a number of important soundings in doubt. By spacing the soundings equal distances between the positions trouble was experienced. Apparently in running these lines from shallow to deeper water and visa versa, soundings were taken closer together in the shallower water and they should have been located more definitely by recording the times of at least a few of the soundings between positions.

In the enlarged plan of the "Kitchen" the position of 1aa is doubtful which tends to make the depth of this approach to the Kitchen doubtful. The position plots as shown in ink. The position in pencil of the same, shown above is where it plots in taking it from the boat sheet. The latter position seems more nearly correct. There probably should have been a little more development in the entrance to this harbor.



Hyd Sheet No. 3715

The development of Shoal Bay is complete enough except that the space between Shoal Bay and the main body of water north of the bars probably should have been developed more thoroughly.

The other enlargements seem to be developed satisfactorily.

Roman E. Bolinger.

Proj. Prot. and Sls plotted in pencil by Field Party.  
Verified and Inked by R.E.B.

Sls in Fathoms.

Rupreanof Hbr. applied to cht. 8859 Dec. 1942  
Other Hbrs. applied via large scale charts.

Applied to chart 16553 Jan 1978 Martot